CLAIMS

What is claimed is:

1. An access point, comprising:
   a web server interface that couples one or more guests to the Internet;
   a usage collector application that monitors usage of all of said guests;
   web cache software that caches web pages that may be of interest to one or more guests in a local memory of the access point.

2. The access point of claim 1, wherein the web cache software predicts web pages that may be of interest to a guest based on that guest's usage pattern, and caches those pages in local memory.

3. The access point of claim 2, wherein the web cache software initiates a signal to the guest indicating that the cached pages are available for viewing.

4. The access point of claim 1, wherein an web cache software caches web pages that have been accessed by multiple guests.

5. The access point of claim 1, wherein each of said guests includes an identification mechanism which is used by said usage collector to compile usage information specific to each guest.

6. The access point of claim 5, further comprising a local monitor that collects usage information from the usage collector application and provides further analysis of the usage information.

7. The access point of claim 6, wherein the local monitor couples to a remote monitor to provide the further analysis of the usage information to the remote monitor.

8. The access point of claim 7, further comprising a diagnostic application that launches when the usage collector detects an abnormality.

9. The access point of claim 8, further comprising a management application that configures the local monitor to provide summary information to the remote monitor.

10. The access point of claim 8 further comprising a management application that requests programs from the remote monitor based on the result of diagnostic application.

11. The access point of claim 10, wherein the web cache application, diagnostic application, and management application may be dynamically modified based on guest usage.

12. A method of providing guests with Internet service, comprising:
detecting a request for Internet access from a guest;
monitoring usage patterns of the guest; and
predicting information that may be of interest for the guest based on the guest's usage patterns; and
locally caching the information that may be of interest to the guest, prior to the time that the guest requests the information.

13. The method of claim 12, further comprising transmitting information relating to the guest's usage patterns to a remote server, and analyzing the guest's usage patterns at the remote server using artificial intelligence software, and correlating the guest's usage patterns with previously detected usage patterns to predict future usage patterns of the guest.

14. The method of claim 12, further comprising informing the guest of the locally cached information.

15. The method of claim 12, wherein the act of predicting includes considering usage patterns of other guests.

16. The method of claim 12, wherein multiple guests may request and receive Internet service at substantially the same time.

17. A system for remotely managing a plurality of Internet access points, comprising:

a plurality of access points that provide Internet access for one or more guests, each of said access points including a web server interface and a usage collector application, with the usage collector application detecting information relating to guest usage;

a remote management server that couples to said plurality of access points via the Internet, said remote server including a remote monitor and a database;

wherein the information relating to guest usage may be transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern.

18. The system of claim 17, wherein the usage collector application also detects information relating to system usage, and said information relating to system usage also is transferred to the remote management server for analysis.

19. The system of claim 17, wherein at least one of the access points is a wireless access point that couples to the one or more guests via a wireless transmission medium.

20. The system of claim 17, wherein the software stored in the database and used to detect usage patterns comprises artificial intelligence software.

21. The system of claim 20, wherein the artificial intelligence software predicts web pages that may be of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests.

22. The system of claim 20, wherein the artificial intelligence software detects improper activity based on usage patterns, and provides instructions to an access point to take corrective action to minimize the effect of the improper activity.

23. The system of claim 17, wherein the access points include a diagnostic application that analyzes the access points to detect possible errors.

24. The system of claim 23, wherein the diagnostic software may signal the remote monitor to download a program to an access point to assist in resolving a detected error condition.

25. An Internet on-ramp that permits multiple guests to obtain Internet access, comprising:

means for interfacing said access point with the multiple guests;

means for coupling the access point to the Internet;

means for monitoring requests made by a guest to collect information on a guest's usage;

means for selecting content that may be of interest to the guest based on the guest's usage; and

means for locally storing content that may be of interest to the user.

26. The on-ramp of claim 25, wherein the means for monitoring requests also monitors operational parameters related to said on-ramp.

27. The on-ramp of claim 25, further comprising means for diagnosing malfunctions of said on-ramp.

28. The on-ramp of claim 26, further comprising means for managing said on-ramp.

29. The on-ramp of claim 28, wherein the selecting means, diagnosing means, and managing means may be dynamically modified based on the guest's usage detected by said monitoring means.